

Nudel'man, Z. N., Sviridova, A. V., and Novikov,
A. S.

SYNTHESIS OF LINEAR ALUMINOSILOXANE POLY-
MERS BY THE SILANOL CONDENSATION METHOD.
[1961] 5p.

Order from ATS \$9.40

ATS-21N56R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 841-846.

DESCRIPTORS: *Aluminum compounds, *Silanes,
*Polymers, Synthesis, Condensation reactions

(Chemistry--Organic, TT, v. 7, no. 3)

62-12113

I. Nudel'man, Z. N.

II. Sviridova, A. V.

III. Novikov, A. S.

IV. ATS-21N56R

V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3094

Office of Technical Services

Mikhailov, B. M. and Aronovich, P. M.
ORGANOBORON COMPOUNDS. LXXVII. POLYMER-
IZATION OF THE BUTYL ESTER OF VINYLBORIC
ACID. [1961] 5p.
Order from ATS \$8.00 ATS-89N54R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 861-864.

DESCRIPTORS: *Organic compounds, *Boron com-
pounds, *Vinyl radicals, *Boric acids, Esters, Poly-
merization, Acids.

(Chemistry--Organic, TT, v. 7, no. 3)

62-12087

I. Mikhailov, B. M.
II. Aronovich, P. M.
III. Title: Polymerization ...
IV. ATS-89N54R
V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3092

Office of Technical Services

Frolova, M. I., Nevskii, L. V., and Ryabov, A. V.
INVESTIGATION OF PHOTODEGRADATION BY THE
USE OF RADIOCARBON C^{14} . Pt. 2 of the Aging of
Poly(Methyl Methacrylate) under the Action of Light.
[1961] 6p.
Order from ATS \$8.95

ATS-57N54R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 877-881.

DESCRIPTORS: *Photochemical reactions, *Radio-
active isotopes, Polymers, Light, Chemical reactions,
Aging. *Acrylic resins.

(Chemistry--Organic, TT, v. 7, no. 4)

62-12086

- I. Frolova, M. I.
- II. Nevskii, L. V.
- III. Ryabov, A. V.
- IV. Title: Aging ...
- V. ATS-57N54R
- VI. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Krylov, O. V. and Sinyak, Yu. E.
NEW CATALYSTS FOR THE POLYMERIZATION
OF ETHYLENE OXIDE. [1961] 8p.
Order from ATS \$5.50

5P - ATS-56N54R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 898-900.

DESCRIPTORS: *Ethylene oxide, *Polymerization,
*Catalysts.

(Chemistry: Inorganic, TT, v. 7, no. 4)

62-12085

I. Krylov, O. V.
II. Sinyak, Yu. E.
III. ATS-56N54R
IV. Associated Technical Serv-
ices, Inc., East Orange,
N. J.

ATS-RJ-3054
also 62-13832

Office of Technical Services

Pshezhetskii, V. S., Kargin, V. A., and Bakh, N. A.
X-RAY INDUCED POLYMERIZATION OF ACETAL-
DEHYDE IN THE CONDENSED PHASE. [1961] 6p.
Order from ATS \$9.75 ATS-91N54R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 925-930.

DESCRIPTORS: *Acetaldehydes, *Polymerization.

(Chemistry--Organic, TT, v. 7, no. 4)

62-12089

- I. Pshezhetskii, V. S.
- II. Kargin, V. A.
- III. Bakh, N. A.
- IV. ATS-91N54R
- V. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

Investigations of Diffusion Processes in Polymers,
Part III. Irreversible Changes Caused in the
Diffusion of Gases Through Polymers by Irradia-
tion of the Latter With the Gamma Rays of a
Co⁶⁰ Source, by N.S. Tikonirova, Yu. M. Malinskiy.
RUSSIAN, per, Vysokomolekulyarnyye Soedineniya,
Vol 2, No 9, 1960, pp 1335-1348. 9233241
AEC UCRL-tr-10026

Sci/Nuclear Sci
Aug 66

Ozonization (Ozonation) of Atactic Polypropylene,
by M. Lazar, I. Pavlinets, et al. 9 pp.

RUSSIAN, per, Vysokomolekulyarne Soedineniya,
Vol III, No 6, 1961, pp 943-947. 9207535

AEC-SCI-Tr-469

ATC 62-22470

Sci - Phys
6 Jun 63

231,862

Nov 01

(SF-1878)

Sergey Sergeyevich Medvedev, 4 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
No 6, 1961, pp 948-950.

JPRS 10277

USSR

174,094

Biog

Orlova, A. V. and Nagdaseva.
CHANGES IN THE MICROSCOPIC STRUCTURE OF
POLYETHYLENE TEREPHTHALATE FIBERS DURING
HEATING. [1961] 6p. (7 diagr. 3 tables omitted)

3 refs.

Order from OTS or SLA \$1.10

61-20877

Trans. of Vysokomolekululyarnye Soedineniya (USSR)
1961, v. 3, no. 7 [p. 953-955].

DESCRIPTORS: *Microstructure, *Ethylenes, *Poly-
mers, *Phthalates, Crystallization, Heating, Elas-
ticity, Temperature, Surfaces, Films, Fibers, *Tires,
*Synthetic fibers, *Cordage.

A structural heterogeneity of polyethylene terephtha-
late fibers is discovered where the basic stem and the
surface film react differently towards an elevation of
temperature. The rapid crystallization in the isotropic
(Materials--Textiles, TT, v. 7, no. 8) (over)

61-20877

I. Orlova, A. V.
II. Nagdaseva

201457

Office of Technical Services

63-17527-5

POLYMER SCIENCE USSR, 1962, VOL. 3, NO. 5,
P. 759-986, Mar 63, 1v.
Order from PP \$100.00/year

I. Pergamon Press, Inc.,
New York

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 960-970, 980-983, 991-1014,
1031-1040, 1044-1061, 1072-1083, 1091-1099, 1110-
1115; no. 8, p. 1135-1149, 1170-1175, 1203-1216,
1220-1223, 1238-1246; no. 9, p. 1311-1320, 1332-1346,
1352-1357, 1377-1388, 1415-1420. Abstracts are in-
cluded of selected articles from v. 4, nos. 5-6.

DESCRIPTORS: *Polymers, Chemistry, *Radiation
chemistry, *Styrenes, *Alcohols, *Cyanates, *Cellu-
lose, *Nitriles, *Propenes, Surface tension, Chlorina-
tion, Sulfonation, *Benzenes, Polymerization, *Ethyl-
enes, *Metalorganic compounds, *Vinyl radicals,
*Acetals, *Acrylic resins, *Photolates, *Chlorides,
*Glycols, *Methyl radicals, *Silicones, *Rubber,
(Chemistry--Organic, TT, v. 10, no. 4) (over)

Office of Technical Services

Il'ina, D. E., Krentsel', B. A., and Topchiev, A. V.
SULFOCHLORINATION OF POLYPROPYLENE. [1961]
Order from ATS \$9.50 ATS-20N57R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 995-999.

DESCRIPTORS: *Sulfonation, *Chlorination, Polymers,
*Propenes.

(Chemistry--Organic, TT, v. 7, no. 10)

62-12541

I. Il'ina, D. E.
II. Krentsel', B. A.
III. Topchiev, A. V.
IV. ATS-20N57R
V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS-RJ-305S

Office of Technical Services

Polyakov, A. I., Derevitskaya, V. A., and Rogovin, Z. A.

NEW CELLULOSE AND OTHER POLYSACCHARIDE DERIVATIVES. XIV. SYNTHESIS OF ESTERS OF CELLULOSE WITH α -AMINO ACIDS. 1961, 8p. 5 refs.

Order from OTS or SLA \$1.10

62-14285

Trans. of Vysokomol[ekulyarnye] Soed[ineniya] (USSR) 1961, v. 3, no. 7, p. 1027-1030.

DESCRIPTORS: *Polysaccharides, *Cellulose esters, Synthesis, *Amino acids, Glycine, Alanine, Alcohols, Methanols, Phenols, Formamides, Carbohydrates.

A method has been developed for synthesizing cellulose esters with α -amino acids by substituting the sulfonic acid groups in the corresponding cellulose ethers. The effect of the nature of the solvent on the direction of the substitution reaction has been established. In dimethyl- (Chemistry--Organic, TT, v. 9, no. 4) (over)

62-14285

- I. Polyakov, A. I.
- II. Derevitskaya, V. A.
- III. Rogovin, Z. A.
- IV. Title: Synthesis ...

Office of Technical Services

Adrova, N. A., Koton, M. M., and Klages, V. A.
PREPARATION OF NEW ORGANOTIN POLYMERS.
[1961] 4p.

Order from ATS \$4.50

ATS-26N56R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 1041-1043.

DESCRIPTORS: *Polymers, *Metalorganic compounds,
*Tin compounds.

(Chemistry--Organic, TT, v. 7, no. 4)

62-12114

I. Adrova, N. A.
II. Koton, M. M.
III. Klages, V. A.
IV. ATS-26N56R
V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3091

Office of Technical Services

Gurvich, L. G.
DEPENDENCE OF THE TENSILE STRENGTH OF
POLYMER FIBERS ON THE CHARACTER OF THE
MOLECULAR WEIGHT. [1961] 4p.
Order from ATS \$5.50

ATS-52N56R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 1062-1064.

DESCRIPTORS: *Polymers, *Fibers, Tensile prop-
erties, Molecular weight.

NAL M 8846

(1961, v. 3, no. 7, p. 1062-1064)

62-12115

I. Gurvich, L. G.
II. ATS-52N56R
III. Associated Technical Ser-
vices, Inc., East Orange,
N. J.

ATS-RJ-3083

Office of Technical Services

O. B. Ptitsyn

Theory of Polyelectrolyte Solutions. Part I.
Dimensions of Polyelectrolyte Molecules at
Small Degrees of Ionization.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, 1961, pp 1084-1090
NTC 72-13229-07D

sept 72

Manyasek, Z.
THE FORMATION AND DECOMPOSITION OF HYDRO-
PEROXIDES OF ATACTIC POLYPROPYLENE. 10p.
5 refs. MTWL: 1103.
Order from OTS or ETC \$1.55

62-26041

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 1104-1108.

DESCRIPTORS: *Propenes, Polymers, Oxidation,
*Peroxides.

62-26041

- I. Manyasek, Z.
- II. MTWL-1103
- III. Stichting Moeilijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

Ryshavy, D., Balaban, L. and others.
OXIDATION OF ISOTACTIC POLYPROPYLENE
(Oksislakie Izomakmicheskogo Polipropilena). [1961]
[12]p. 5 refs.
Order from OTS or SLA \$1.60

62-14283

Trans. of Vysokomol[ekulyarnye] Soed[ineniya] (USSR)
1961, v. 3, no. 7, p. 1110-1115.

DESCRIPTORS: *Propenes, Polymers, *Oxidation,
Stability, Molecular weight, Chemical reactions,
Processing, Production, Chemical industry.

Experimental results on the oxidation of polypropylene
between 120 and 150°C are given. A polypropylene
with a molecular weight of 400,000 and an ash content
of 0.5% was investigated. The degradation products
decrease the rate of oxidation. The overall activation
energy of oxidation between 120° and 150°C was
E = 29 kcal, the activation energy of acetaldehyde
(Engineering--Chemical, TT, v. 8, no. 2) (over)

62-14283

I. Ryshavy, D.
H. Balaban, L.

Office of Technical Services

Tsetlin, B. L., Medved, T. Ya. and others.
RADIATION POLYMERIZATION OF OXIDES OF
TERTIARY MONOVINYLPHOSPHINES, 15 Sep 61
[3]p. 3 refs.

Order from OTS or SLA \$1.10

62-10226

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, p. 1117-1118.

DESCRIPTORS: *Vinyl radicals, *Phosphine oxides,
*X-rays, *Polymerization, Thermal stresses, Sta-
bility, Plastics.

The polymerization of oxides of diethylvinylphosphine
(I) and diphenylvinylphosphine (II) was initiated by
the radiation method. The samples were irradiated
in the fused state in vacuum. For irradiation of I,
the dose strength was 4.5×10^{16} ev/ml sec, length of
(Materials--Plastics, TT, v. 7, no. 10) (over)

62-10226

I. Tsetlin, B. L.
II. Medved, T. Ya.

Office of Technical Services

Shostakovskii, M. P., Kotrelev, V. N. and others.
SYNTHESIS AND REACTIONS OF TIN-CONTAINING
ESTERS OF ACRYLIC AND CINNAMIC ACIDS. Pt. 4
of Organotin Monomers and Polymers. [1961] 3p.
Order from ATS \$3.50 ATS-03N57R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 8, p. 1128-1130.

DESCRIPTORS: *Synthesis. *Chemical reactions.
*Esters. Acrylic acids, Styrenes. *Tin compounds.
*Cinnamic acids.

(Chemistry- Organic, TT, v. 7, no. 10)

62-12662

- I. Shostakovskii, M. P.
- II. Kotrelev, V. N.
- III. Title: Organotin ...
- IV. ATS-03N57R
- V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3089

Office of Technical Services

Shostakovskii, M. P., Kotrelev, V. N. and others.
STUDY OF THE FORMATION OF ORGANOTIN POLY-
MERS AS A FUNCTION OF THE POLYMERIZA-
TION CONDITIONS AND SOME PHYSICOCHEMICAL
PROPERTIES OF ORGANOTIN COPOLYMERS. Pt. 5
of the Synthesis and Transformation of Organotin
Monomers and Polymers. [1961] 4p.
Order from ATS \$6.00

ATS-88N56R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 8, p. 1131-1134.

DESCRIPTORS: *Tin, *Polymers, Metalorganic com-
pounds, Synthesis, Physical chemistry, Polymeriza-
tion, Copolymerization.

(Chemistry--Organic, TT, v. 7, no. 3)

62-12119

I. Shostakovskii, M. P.
II. Kotrelev, V. N.
III. Title: Synthesis ...
IV. ATS-88N56R
V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3090

Office of Technical Services

Firsov, A. P., Tsvetkov, V. I., and Chirkov, N. M.
KINETICS AND MECHANISM OF α -OLEFINS POLYMERIZATION ON COMPLEX CATALYSTS. II. POLYMERIZATION OF PROPYLENE IN THE PRESENCE OF TITANIUM TRICHLORIDE WITH VARIOUS ALKYLALUMINUM COMPOUNDS. [1962] 11p. 9 refs. Order from OTS or SLA \$1.60 62-18382

Trans. of Vysokomolekulyarnye Soed[ineniya] (USSR) 1961, v. 3 [no. 8] p. 1161-1169.

DESCRIPTORS: *Propenes, Polymerization, Reaction, Kinetics, Catalysts, *Complex compounds, *Transition compounds, Chlorides, *Metalorganic compounds, *Aluminum compounds.

The polymerization of propylene under the influence of α -TiCl₃ and various AlR₃ compounds was investigated. The aluminum compounds were Al(C₂H₅)₃. (Chemistry--Physical, TT, v. 9, no. 5) (over)

62-18382

I. Firsov, A. P.
II. Tsvetkov, V. I.
III. Chirkov, N. M.
IV. Title: Polymerization ...

Office of Technical Services

Kinetics and Mechanism of the Initial Stage
of Condensation Between Terephthalyl Chloride
and Ethylene Glycol. Part II. Temperature
Dependence of the Reaction Rate, by
S. G. Entelis.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, No 8, 1961, pp 1170-1175.
NTC-70-13072-11I

Feb 72

Studies in the Field of Co-ordination Chain
Polymers. V. Synthesis of Metal-Containing
Bis-(β -Ketones), by V. V. Korshak.

RUSSIAN, per, Vysokomolekulyarnyye
Soyedineniya, Vol III, No 8, 1961, pp 1203-1209.

MLL Ref: 5828.4 1962 (10092)
(Loan)

Sci -
Jul 63

238,378

Gromov, B. A., Miller, V. B., and others.
MOBILITY OF IONOLE IN POLYPROPYLENE AND
POLYFORMALDEHYDE. [1962] 6p. (2 figs., omitted)
3 refs.

Order from ODS on SLA \$1.10

62-14422

Trans. of Vsesoyuzskiy nauchnyy Sbornik (USSR) 1961,
v. 3, no. 5, p. 1231-1235.

DESCRIPTORS: *Polymers, Stabilization, *Phenols,
Butyl radicals, Methyl radicals, Diffusion, *Propene-1,
*Formaldehyde.

The diffusion coefficients of 2,6-di-tert-butyl-4-methyl-
phenol (ionole) in polypropylene and polyformaldehyde
for various temperatures were determined. Within a
temperature interval of 60-110° the diffusion coefficient
of ionole in propylene is equal to $D = 5 \cdot 10^6 \cdot e^{-2300/RT}$,
and the diffusion coefficient of ionole in polyformaldehyde
(at 80-110°) is equal to $D = 2 \cdot 5 \cdot 10^6 \cdot e^{-16300/RT}$.
(Author)

62-14422

1. Title: Ionole
2. Gromov, B. A.
3. Miller, V. B.

(Chemistry--Physical, 17,
v. 9, no. 5)

Office of Technical Services

Thermochemical Criteria of Plasticized
Drawing, by E. Z. Fainberg, N. V. Mikhailov. 6p
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, No 8, 1961, pp 1234-1237.
SLA TT-66-10657.

Sci-M&M
Jul 66

306,109

X-Ray Examination of Polyethylene Single Crystals
at Various Temperatures, by Li-Shen.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol III, No 8, 1961, pp 1238-1242

NIL M 8847

Sci - Chem
Mar 63

223,696

Levin, P. I., Lukovnikov, A. P. and others.
MANIFESTATION OF SYNERGISM IN MIXTURES OF
MERCAPTOBENZIMIDAZOLE WITH SOME INHIB-
ITORS. Pt. I of Mutual Intensification (Synergism) of
Antioxidant Activity. [1961] Sp.
Order from ATS \$7.50

ATS-71N57R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 8, p. 1243-1246.

DESCRIPTORS: *Thiols, *Benzimidazoles, Inhibition,
Pharmacology, *Antioxidants.

(Biological Sciences--Pharmacology, TT, v. 7, no. 10)

62-12660

- I. Title: Synergistic action
- I. Levin, P. I.
- II. Lukovnikov, A. P.
- III. Title: Mutual ...
- IV. ATS-71N57R
- V. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Theory of Polyelectrolyte Solutions. Part II.
Macromolecules of Polyelectrolytes in Salt
Solutions, by O. B. Ptitsyn
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, 1961, pp 1251-1259
NTC 71-16824-07D

Feb 72

Bykov, A. N.
SYNTHESIS AND INVESTIGATION OF SOME COL-
ORED POLYAMIDES. [1962] 4p.
Order from ATS \$7.10

ATS-13P59R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 9, p. 1307-1310.

DESCRIPTORS: *Amides, Polymers, Synthesis, Colors

N.I.I. M 8839

(Chemistry--Organic, TT, v. 8, no. 2)

62-17154

I. Bykov, A. N.
II. ATS-13P59R
III. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RS-3606

Office of Technical Services

Bogdanov, M. N., Kudryavtsev, G. I. and others.
SYNTHESIS OF SOME POLYAMIDES DERIVED FROM
ω-AMINOCARBOXYLIC ACIDS CONTAINING BEN-
ZENE AND CYCLOHEXANE RINGS IN THE METH-
YLENE CHAINS. [1962] 8p.
Order from ATS \$13.25

ATS-14P59R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 9, p. 1326-1331.

DESCRIPTORS: *Amides, Polymers, Synthesis,
*Amino acids, *Carboxylic acids, *Benzenes, *Cyclo-
hexanes, *Methanes, Chemical reactions.

(Chemistry--Organic, TT, v. 8, no. 1)

62-17155

I. Bogdanov, M. N.
II. Kudryavtsev, G. I.
III. ATS-14P59R
IV. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Polymerization of Methylmethacrylate in a
Strong Direct Electric Field, by M. M.
Khaletskiy, B. I. Sukhorukov.

RUSSIAN, per, Vysokomolekuliarnye Soedineniya,
Vol III, 1961, pp 1347-1351. 9205022

AEC-UCRL-Tr-906(L)

Sci - Phys

227,043

Apr 63

Moiseev, V. D. and Neiman, M. B.
MOLECULAR WEIGHT, NUMBER OF DOUBLE
BONDS AND THE MECHANISM OF THERMAL DEG-
RADATION OF VINYL POLYMERS. [1962] 9p.
3 refs.

Order from CTS(Chem) \$9.00 CTS(Chem)-261
subsequent copies \$1.50

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 9, p. 1383-1388.

DESCRIPTORS: *Polymers, *Vinyl radicals, Molecu-
lar weight, Chemical bonds, Deterioration, Temper-
ature, Molecules, Atoms, Molecular isomerism.

(Chemistry--Organic, TT, v. 8, no. 4)

62-12962

I. Moiseev, V. D.
II. Neiman, M. B.
III. CTS(Chem)-261
IV. Chemical Translating
Service, Palo Alto, Calif.

ATS-15P57R
ATS-RJ-3597

Office of Technical Services

Meklakov, A. L., Pimenov, G. G., and
Sagitov, R. Ya.

INVESTIGATION OF POLYMERS SUBJECTED TO
UNIAXIAL STRETCHING AT HIGH DEFORMATION
RATES. [1962] 6p.

Order from ATS \$9.25

ATS-73P62R

Trans. of Vysokomolekul[yarnye] Soedineniya] (USSR)
1961, v. 3, no. 9, p. 1410-1414.

DESCRIPTORS: *Polymers, Tensile properties,
*Deformation, Plastic flow, Viscosity.

(Chemistry--Physical, TT, v. 9, no. 2)

62-34270

I. Meklakov, A. L.

II. Pimenov, G. G.

III. Sagitov, R. Ya.

IV. ATS-73P62R

V. Associated Technical

Services, Inc.,

East Orange, N. J.

ATS-RJ-3594

Office of Technical Services

Kitaigorodskii, A. I., Tavankin, D. Ya., and
Petrov, Yu. M.
LONG PERIODS IN ENANTH FIBERS. [1962] 4p.
Order from ATS \$2.50 ATS-16P59R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 9, p. 1428.

DESCRIPTORS: *Synthetic fibers, *Amines,
*Enanthic acid, Polymers, Preparation, Condensation
reactions.

11-11-62

(Materials--Textiles, TI, v. 5, no. 10)

62-17157

- I. Title: Enanth fibers
- I. Kitaigorodskii, A. I.
- II. Tavankin, D. Ya.
- III. Petrov, Yu. M.
- IV. ATS-16P59R
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

63-17527-6

POLYMER SCIENCE USSR, 1962, VOL. 3, NO. 6,
P. 987-1166. May 63, 1v
Order from PP \$100.00/year

I. Pergamon Press, Inc.,
New York

Trans. of *Vysokomolekulyarnye Soedineniya* (USSR)
1961, v. 3, no. 10, p. 1446-1448, 1482-1494,
1511-1523, 1549-1560, 1591-1606; no. 11,
p. 1655-1660, 1689-1683, 1692-1697, 1716-1738,
1746-1754; no. 12, p. 1769-1773, 1794-1799,
1816-1822, 1857-1862, 1874-1875. Abstracts are in-
cluded of selected articles from v. 4, nos. 7-8.
Another trans. of p. 1482-1490 is available from OTS
or SLA \$1.10 as 63-18414 [1963] 10p.

DESCRIPTORS: *Polymers, Chemistry, *Plastics,
*Polyethylene plastics, *Ziegler catalysts, *Isoprene,
*Styrene plastics, *Triazines, *Halocarbon plastics,
*Fluorocarbons, Catalysis, *Polyvinyl chloride,
*Silicones, *Metalorganic compounds, Aluminum com-
(Chemistry--Organic, TT, v. 10, no. 10) (Over)

Office of Technical Services

Korotkov, A. A. and Rakova, G. V.
COPOLYMERIZATION OF ISOPRENE WITH STYRENE
THROUGH BUTYLLITHIUM. [1963] 10p. 11 refs.
Order from OTS or SLA \$1.10 63-18414

Trans. of Vysokomolekulyarnye Soed[ineniya] (USSR)
1961, v. 3 [no. 10] p. 1482-1490.

DESCRIPTORS: *Isoprene, *Styrenes, *Butyl radicals,
*Lithium compounds, Copolymerization, Reaction
kinetics, Catalysts.

The copolymerization of isoprene and styrene under
the influence of butyllithium in benzene at 30 C was
investigated (catalyst concentration 0.004 Mole/l,
over-all monomer concentration 2 Mole/l). The com-
position of the copolymer as function of the initial
monomer mixture obeys Wall's equation: $\lg A/A_0 =$
 $\Delta \lg B/B_0$. The monomer reactivity constants are $\alpha =$
(Materials--Plastics, TT, v. 10, no. 8) (over)

63-18414

1. Title: Butyllithium
- I. Korotkov, A. A.
- II. Rakova, G. V.

Office of Technical Services

Aromatic Polytriazines, by A. A. Berlin, B. I.
Ligon'kiy, et al.

RUSSIAN, per, Vysokomolekul'arnye Soedineniya,
Vol III, No 10, 1961, pp 1491-1494. 920495

AEC-SCL-Tr-454

Sci - Chem

226,852

Apr 63

Polymerization Kinetics of Hydrocarbons With
Conjugated Bonds, II. Polymerization of
Phenylacetylene and the Paramagnetic Proper-
ties of the Polymers, by P. S. Shantarovich,
I. A. Shliapnikova, 11 pp.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya
Vol III, No 10, 1961, pp 1495-1499.
9066960

ABC SCL-T-435

Sci - Phys
Oct 62

212, 686

Studies in the Field of Coordination Chain Polymers
VII. Coordination Polymers Based on Quinizarin and

4,4'-Bis-(Acetoacetyl)-Diphenyl Ether, by
V. V. Korshak, S. V. Vinogradova, et al, 12 pp.
RUSSIAN, per, Vysokoye Soedin, Vol III, No 10,
1961, pp 1500-1508. 9692616
RSIC-168

Sci-Chem
June 64

260,665

Reactions of Granular Copolymers of Vinyltoluene
with Divinylbenzene and Other Cross-linking
Agents, by A. B. Davankov, O. A. Vitol.
RUSSIAN, per, Vysok Soed, Vol 3, 1961,
pp 1566-1571.
NTC-69-16362-111

Sci-Materials
Feb 70

402,940

Sidorovich, A. V. and Kuvshinski, E. V.
THERMOMECHANICAL PROPERTIES OF THE LINEAR
AMORPHOUS POLYMERS POLYMETHYLMETHACRY-
LATE AND POLYSTYRENE, tr. by George N.

Kasachkov, 29 Nov 62 [15]p. 10 refs. [AMC] (Redstone)
Trans-nr 41-62.

Order from OTS or SLA \$1.60

63-13394

Trans. of [Vysokomolekulyarnye Soedineniya] (USSR)
1961, v. 3, no. 11, p. 1698-1704.

DESCRIPTORS: Polymers, *Plastic films, Mechanical
properties, Temperature, *Acrylic resins, *Styrenes,
Deformation, Elasticity.

A thermomechanical study of the amorphous linear
polymers polymethylmethacrylate and polystyrene was
carried out at low levels of tensile stress. The thermo-
mechanical properties of these two polymers were found
(Materials--Plastics, TT, v. 9, no. 3). (over)

63-13394

- I. Sidorovich, A. V.
- II. Kuvshinski, E. V.
- III. AMC (Redstone) Trans-
41-62
- IV. Army Missile Command,
Redstone Arsenal, Ala.

Office of Technical Services

Effect of Annealing of Polymer Glasses on the
Temperature Dependence of the Heat Capacity in
the Softening Range, by M. V. Volkenshtein,
Yu. SA. Sharanov, 14 pp.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol III, No 11, 1961, pp 1739-1745. 9670069

(SIR 01/16.7647) DDC RBIC-47
CRD, LAH 57077-63-23755
344,096
Sci - Chem
Sep 63

Studies in the Field of Co-ordination Polymers.
VIII. Polymers Based on Aromatic 0,0' -dicarboxyl
Acids and Divalent Metals, by V. V. Korshak.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol III, No 12, 1961, pp 1808-1815.

REL M 10007

Sci - Phys Chem
May 63

229,340

Polymers With Conjugated Bonds and Hetero-Atoms in
the Conjugated Bond Chain. Part 19. Some Properties
of Aniline Black, by V. P. Parini.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya, Vol 3,
1961, pp 1870-1873.

NTC-71-10200-07C

Nov 71

On the Mechanism of Reaction Chain
Termination in the Radical Polymerization
of Vinyl Chloride by Means of C^{14} -Labeled
Initiators, by G. A. Razuvaev.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, 1961, pp 1949-1953.
NTC-71-11534-111

Feb 72

POLY SCIENCE USSR, 1963, VOL. 4, NO. 1, P. 1-205.
June 63, Iv,
Order from PP \$140.00/year

Trans. of *Vysokomolekulyarnye Soedineniya* (USSR)
1962, v. 4, no. 1, p. 3-8, 25-29, 42-51, 64-65,
85-90, 98-104, 109-123; no. 2, p. 174-187, 201-206,
237-241, 250-255, 270-275, 304-311; no. 3, p. 351-356,
361-365, 371-375, 383-388, 393-404, 429-432, 463-470;
no. 4, p. 481-491, 516-522, 533-539, 577-582. Ab-
stracts are included of selected articles from v. 4,
no. 9.

DESCRIPTORS: *Polymers, Chemistry, *Elastomers,
*Acrylic resins, *Butadienes, Polymerization, Potas-
sium compounds, *Amides, *Polyvinyl chloride, Radia-
tion chemistry, *Plastics, *Platinum catalysts, *Sty-
rene plastics, Peroxides, *Phenolic plastics, *Fibers
(Chemistry--Organic, TT, v. 10, no. 9) (over)

63-22211-1

I. Pergamon Press, Inc.,
New York

Office of Technical Services

Kinetics of the Disappearance of Free Radical
in Irradiated Polyvinyl Chloride, by Z. S. Egorova,
et al.

RUSSIAN, per, Vysok Soedineniya, Vol IV, No 1, 1962.

✓UKAEA-D/LIB-Tr-45

Available on Jan 63

Sci - Nucl Sci

Jul 63

Chelate Polymer Research. Part 2. Physico-
chemical Properties of Chelate Polymers from
5,5'-Methylenebis(Salicylaldehyde), by
V. V. Rode.
RUSSIAN, per, Vysokomolekul Soedin,
Vol 4, No 1, 1962, pp 13-19.
ATS-4880

Sci
Dec 68

368,748

Co-ordination Polymers. IX. Metal-Containing
Polymers Based on Aliphatic Dicarboxylic
 α, α' -dihydroxydicarboxylic and α, α' -dialkoxycarboxylic
Acids, by V. V. Korshak.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, No 1, 1962, pp 20-24.

MLL Ref: 5826.4 1963 (10 107)
(Loan)

Sci - M/M

343406

Reikhsfel'd, V. G. and Ivanova, A. G.
SYNTHESIS OF LINEAR DIMETHYLMETHYLPOLY-
SILOXANES BY THE METHOD OF COPOLYMERIZA-
TION OF CYCLOSILOXANES. [1963] 10p 14refs
Order from OTS, SLA, or ETC \$1.10 TT-64-13664

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 1, p. 30-36. (Abstract available)

DESCRIPTORS: *Silicones, Synthesis (Chemistry),
Copolymerization, Reaction kinetics, Silanes,
Hydrolysis.

The possibility of synthesizing high-molecular linear
polysiloxanes with various contents of CH_3HSiO units by
copolymerization of octamethylcyclotetrasiloxane
(OMCTS) with tetramethylcyclotetrasiloxane (TMCTS)
and pentamethylcyclopentasiloxane (PMCP5) was demon-
strated. The copolymerization constants of the monomer
pairs studied were calculated. It was established that
(Chemistry, TT, v. 11, no. 11) (over)

TT-64-13664

I. Reikhsfel'd, V. G.
II. Ivanova, A. G.
III. Naval Applied Science Lab.,
Brooklyn, N. Y.

Office of Technical Services

Phosphorus-Containing Polymers. Part 27.
Hetero-Chain Polyesters of
Vinylphosphoric Acid and Certain
Glycols, by V. V. Korshak.
RUSSIAN, per, Vysokomolekularnye
Soedineniya, Vol 4, No 1, 1962,
pp 58-63
NTC 72-12379-11I

July 72

Chelate Polymers. Part 3. Some Polymers of
5,5'-Methylenebis(Salicylaldehyde) With
Metals, by A. P. Terent'ev.
RUSSIAN, per, Vysokomolekul Sodin,
Vol 4, No 1, 1962, pp 91-94.
ATS-4881

Sci
Dec 68

368,749

Synthesis of Linear and Cyclolinear Organosilicon
Compounds With Phenylsiloxy Chains in the
Molecules, by V. E. Nikifanov, 7 pp.
RUSSIAN, per, Vysokomolekulyarnye Soyedinyeniya,
Vol IV, No 1, 1962, pp 105-108. 9692455
DDC xRSIC1158

Sci - Chem
May 64

258,946

Barambolm, N. K.
MECHANICAL DEGRADATION OF POLYSTYRENE
AND POLY(METHYL METHACRYLATE) IN THE
PRESENCE OF VARIOUS ACCEPTORS. [1962] 8p.
Order from ATS \$11.60 ATS-37P60R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 1, p. 109-115.

DESCRIPTORS: *Polymers, *Styrenes, *Acrylic res-
ins, *Methyl radicals, Mechanical properties, De-
terioration, Chemical reactions.

(Chemistry--Organic, TT, v. 8, no. 4)

62-17276

- I. Barambolm, N. K.
- II. ATS-37P60R
- III. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

(17-0129)

PART I. MOLECULAR STRUCTURE OF SUBSTITUTED
ACID OBTAINED BY VARIOUS METHODS, BY
HENRI A. L. TONER, A. L. ZINER, 3 PP. .

RESEARCH, FOR, TECHNOLOGICAL, GOVERNMENT,
VOL. IV, NO 1, 1968, PP 10-12.

JAN 1968

SCI - CHEM

JAN 68

130,136

s-294/62

Electron ~~XXX~~ Microscope Study of DNA II. Changes
in the Molecular Morphology of DNA Under the Effect
of Ionizing Radiation, by A. M. Tongur, A. L. ~~XXX~~
Zaydes, et al, (SF-2259)

RUSSIAN, per, Vysolomolekulyarnyye Soyedineniya,
X Vol IV, No 1, 1962, pp 143-144.

*JPRS

Sci - Phys
25 May 62

Zhurkov, S. N., Sanfirova, T. P., Tomashevskii,
E. E.
MECHANICAL PROPERTIES OF RUBBER AT HIGH
STRETCH RATES. [1962] 5p
Order from ATS \$8.25 ATS-20P62R

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
1962, v. 4, no. 2, p. 196-200.

DESCRIPTORS: *Rubber, Mechanical properties.
Elasticity.

(Materials--Rubber, TT, v. 8, no. 11)

62-34200

I. Zhurkov, S. N.
II. Sanfirova, T. P.
III. Tomashevskii, E. E.
IV. ATS-20P62R
V. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

POLYTINORGANOSILOXANES, BY E. Z. ASNOVICH,
K. A. ANDRIANOV, 7 PP.

RUSSIAN, PER, VYSOKOMOLEKULYARNYYE SOYEDINENIYA,
VOL IV, NO 2, 1962, PP 216-220.

JPRS 16345

SCI - NUCLEAR PHYS

DEC 62

217,122

Mechanism of the Formation of Secondary
Amines by Catalytic Hydrogenation of
Adiponitrile, by L.Kh. Freidlin, T.A.
Sladkova.

RUSSIAN, per Vysokomolek. Soedin, 1962,
pp 229-232
GB 39 Dyes LT 2451

Sci -
Aug 67

338-398

Phosphorus-Containing Polymers III. Application of the
Arbuzov Reaction for Polymerisation of Ethylene Alkyl
Phosphites, by K.A. Petrov, E. Ye. Rfant'ev, 6 pp.

RUSSIAN, PER, Vysokomolekulyarnyye Soyedineniya, Vol. IV,
No 2, 1962, pp 246-249. 9678636

FED-TT-62-1058

Sci - Chem
Nov 62

216,903

POLYORGANOTITANOSILOXANES II. THE COHYDROLYSIS
REACTION OF BIS - (ACETYLACETONATE)DICHLORO-
TITANIUM WITH ALKYL(ARYL)TRICHLOROSILANES, BY
K. A. ANDRIANOV, SH. V. PICHKADZE, 7 PP.

RUSSIAN, PER, VYSOKOMOLEKULARNYE SOYEDINENIYA,
VOL IV, NO 2, 1962, PP 256-260.

JPRS 16345

SCI - NUCLEAR PHYS

DEC 62

217,121

Tarutina, L. I. and Dunaevskaya, Ts. S.
SPECTROSCOPIC INVESTIGATION OF STRUCTURAL
CHANGES ACCOMPANYING THE THERMAL AGING
OF POLY(TRIFLUOROCHELOETHYLENE). [1962] 6p.
Order from ATS \$9.75 ATS-44P65R

Trans. of Vysokomolekul'yarnye Soedin[eniya] (USSR)
1962, v. 4, no. 2, p. 276-281.

DESCRIPTORS: Polyethylene plastics, Fluorides,
Chlorides, Heat treatment, Aging, Molecular
structure, Spectrographic analysis

(Materials--Plastics, TT, v. 9, no. 5)

63-12448

I. Tarutina, L. I.
II. Dunaevskaya, Ts. S.
III. ATS-44P65R
IV. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Voyutskii, S. S., Gul', V. E. and others.
ADHESION OF VARIOUS ELASTOMERS. Pt. 1 of
Adhesion of Polymers to Silicate Glass. [1962] [10]p.
27 refs.

Order from OTS or SLA \$1.10

62-20432

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 2, p. 285-293.

DESCRIPTORS: *Elastomers, *Adhesion, Polymers,
Silicates, Glass.

For cases where interpenetration of adhesive and substrate molecules is without a doubt, it was shown that adhesion of elastomers to silicate glass depends on time and contact temperature in the same way as adhesion of elastomer to the polymeric substrate. It was determined that all the factors, which are favorable to diffusion increase, are also favorable to the elastomer (Materials--Adhesives, TT, v. 9, no. 7) (over)

62-20432

I. Voyutskii, S. S.
II. Gul', V. E.
III. Title: Adhesion ...

OTS or SLA
+3.60
(36 pp.) 63-14068

Office of Technical Services

Gul', V. E., In-si, C. and others.
RUPTURE OF THE ADHESIVE BOND IN THE
SEPARATION OF ELASTOMER-GLASS JOINTS.
Pt. 2 of Adhesion of Polymers to Silicate Glass.
[1962] 5p.

Order from ATS \$7.50

ATS-46P63R

Trans. of Vysokomolekul[yarnye] Soedin[eniya] (USSR)
1962, v. 4, no. 2, p. 294-298.

DESCRIPTORS: *Bonded joints, *Glass, *Rubber ad-
hesives, *Elastomers, Separation, *Adhesion, Rup-
ture, *Polymers, *Silicates, Glass seals.

(Materials--Adhesives, TT, v. 8, no. 11)

62-34191

I. Gul', V. E.
II. In-si, C.
III. Title: Adhesion ...
IV. ATS-46P63R
V. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Rado, R., Shimunkova, D., and Malyak, L.
DEGRADATION AND CHAIN BUILDING OF POLY-
PROPYLENE UNDER THE INFLUENCE OF PEROX-
IDES. [1962] [20p. 8 refs.
Order from CTS or SLA \$1.60

63-10784

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 2, p. 304-311.

DESCRIPTORS: *Polyethylene plastics, *Propenes,
Polymers, Degradation, Polymerization, Chain re-
actions, Reaction kinetics, *Peroxides, Chemical bonds,
Molecular weight, Molecular isomerism.

Both in the case of polyethylene and polyisobutylene and
in the case of polypropylene, monomolecular decomposi-
tion of peroxide is accompanied by a chain reaction
with induced decomposition of the second order. From
evaluation of the double bond content in the polymer,
as well as from the kinetics of decomposition of the
(Materials--Plastics, TT, v. 10, no. 1) m(over)

63-10784

I. Rado, R.
II. Shimunkova, D.
III. Malyak, L.

Office of Technical Services

Structural Transformations in Fibrillar Proteins, by
Z. A. Kapralova.

RUSSIAN, per, Vysokomolekulyarnie Soedineniya, Vol 4,
No 3, 1962, pp 321-326.

*NTIS TT 72-51148

Jan 73

Polymers With a Conjugated Bond System and
Heteroatoms in the Conjugation Chain. XX.
Synthesis of Polymeric Phthalocyanines and
Investigation of their Basic Physicochemical
Properties, by A. A. Berlin, L. G. Cherkashina,
E. I. Balabanov, 12 pp.
RUSSIAN, per, Vysok Soed, Vol IV, No 3,
1962, pp 376-382, 9223014
Ames Meteorol Soc
T-R;-431

Sci - Chem
Jul 64

263,858

Minsker, K. S., Kronman, A. G. and others.
STEREOSPECIFIC HOMOGENEOUS POLYMERIZATION
OF VINYL CHLORIDE. [1962] 7p.
Order from ATS \$9.75

ATS-29P63R

Trans. of Vysokomolekulyarnye Soedin[eniya] (USSR)
1962, v. 4, no. 3, p. 383-388.

DESCRIPTORS: *Stereochemistry, *Vinyl chlorides,
*Polymerization, Chlorides, Vinyl radicals.

(Chemistry--Organic, IT, v. 9, no. 2)

62-34262

- I. Minsker, K. S.
- II. Kronman, A. G.
- III. ATS-29P63R
- IV. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Studies in the Field of Polymer Synthesis.
IV. Synthesis of Copolyamides from Xylylene
Diamines, Hexamethylene Diamine and Adipic
Acid, by S. R. Rafikov, et al.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, No 3, 1962, pp 414-418.

REL M 10013

Sci - High Chem
May 63

229,341

Rodionova, E. F., Kolesnikov, G. S. and others.
POLYMERIZATION AND COPOLYMERIZATION OF
DIPHENYL VINYLPHOSPHONATE. Pt. 37 of Carbon-
Chain Polymers and Copolymers. [1962] 5p.
Order from ATS \$6.00

ATS-46P61R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 3, p. 448-451.

DESCRIPTORS: *Polymerization, *Copolymerization,
*Diphenyl, *Vinyl radicals, Phosphonium radicals.

(Chemistry--Organic, TT, v. 8, no. 5)

62-17714

- I. Rodionova, E. F.
- II. Kolesnikov, G. S.
- III. Title: Carbon...
- IV. ATS-46P61R
- V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3586

Office of Technical Services

A Study of Conformational Changes in Macromolecules in Solutions. III. Conformational Changes in 2-Vinylpyridine-Methacrylic Acid Copolymer, by I. T. Slyusarov, S. S. Urazovskiy, 9 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya, No 4, 1962, pp 481-485. 9680151

FTD-TT-62-1572

Sci-Chem
Apr 63

226,689

The Polymerization of Acrolein and its Derivatives.
I. Low-Temperature Polymerization of Acrolein and
c-Hydroxyacrolein, by L. V. Andreyeva, et al.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol IV, No 4, 1962, pp 528-532.
NASA TT F-9941

Sci-Chem
Jun 65

281,090

Sazhin, B. I. and Eldenat, M. P.
[STUDIES] OF ELECTROCONDUCTIVITY OF
POLYMERS. V. POLYCARBONATE, POLYETHYL-
ENETEREPHTHALATE, MIXED POLYESTER AND
POLYOXYMETHYLENE. [1963] 19p. 21 refs.
Order from OTS or SLA \$1.60

63-18740

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 4, p. 583-590.

DESCRIPTORS: Polymers, *Electrical conductance,
*Polyester plastics, *Acetal plastics, *Carbonates,
*Ethylene, Glycols, *Phthalates, *Sebacic acid,
Formaldehyde, Temperature, Loading (Mechanics),
Polarization, Crystallization.

The results are described of the experimental deter-
mination of the resistivity of polycarbonate, polyethyl-
eneterephthalate, mixed polyester of terephthalic and
(Materials--Plastics, TT, v. 10, no. 12) (over)

63-18740

1. Title: Paraformaldehyde
2. Title: Polycarbonates
3. Title: Polyethylene
terephthalate
- I. Sazhin, B. I.
- II. Eldenat, M. P.
- III. Title: Polycarbonate ...

Office of Technical Services

Kargin, V. A., Sogolova, T. I., and Metel'skaya,
T. K.
THE EFFECT OF ANISODIAMETRIC FILLER PAR-
TICLES ON THE PROPERTIES OF POLYMERS, I.
[1963] [9p] 8 refs
Order from OTS or SLA \$1.10

63-20055

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4 [no. 4] p. 601-604.

DESCRIPTORS: *Fibers (Synthetic), *Dacron, *Poly-
ester plastics, *Polyethylene plastics, *Butenes,
*Fillers, Physical properties, Particle size.

As a result of the investigations it became evident that
the addition of anisodiametric particles to the polymer
in the absence of chemical reactions, has an important
effect on the mechanical properties of the polymer even
at relatively low filler concentrations. It is safe to say
that the increase in the strength, modulus SO, and flow
(Materials--Textiles, TT, v. 10, no. 11) (over)

63-20065

I. Kargin, V. A.
II. Sogolova, T. I.
III. Metel'skaya, T. K.

Office of Technical Services

Theory of Helix-Coil Transitions in
Biopolymers, The Helix-Coil Transitions in
Polypeptide Chains Under Load, by T.
Birshtein.
RUSSIAN, per, Vysokomolekulyarnye Soediniya,
Vol 4, No 4, 1962, pp 12-605-612.
CSIRO/No 6099

Sci -
Jul 67

335,001

POLYMER SCIENCE USSR, 1963, VOL. 4, NO. 2,
P. 207-396. July 63, 1v
Order from PP \$140.00/year

Trans. of *Vysokomolekulyarnye Soedineniya* (USSR)
1962, v. 4, no. 5, p. 642-654, 662-669, 6678-682,
704-707, 769-782; no. 6, p. 843-847, 860-868,
8885-888, 907-916, 944-947; no. 7, p. 972-981,
1000-1004, 1027-1032, 1060-1063, 1098-1102,
1134; no. 8, p. 1137-1144, 1151-1154, 11155-1162,
1168-1171, 11178-1185, 1197-1203, 1223-1234. Ab-
stracts are included of selected articles from v. 4,
no. 10.

Other translations are available elsewhere.

DESCRIPTORS: *Polymers, Chemistry, *Plastics,
*Fillers, *Carbon black, *Metalorganic compounds,
Iron compounds, *Silicones, *Polyvinyl alcohol,
*Acetal plastics, *Polyester plastics, *Styrene
(Chemistry--Organic, TT, v. 10, no. 10) (over)

63-22211-2

I. Pergamon Press, Inc.,
New York

Office of Technical Services